Facilities Quarterly

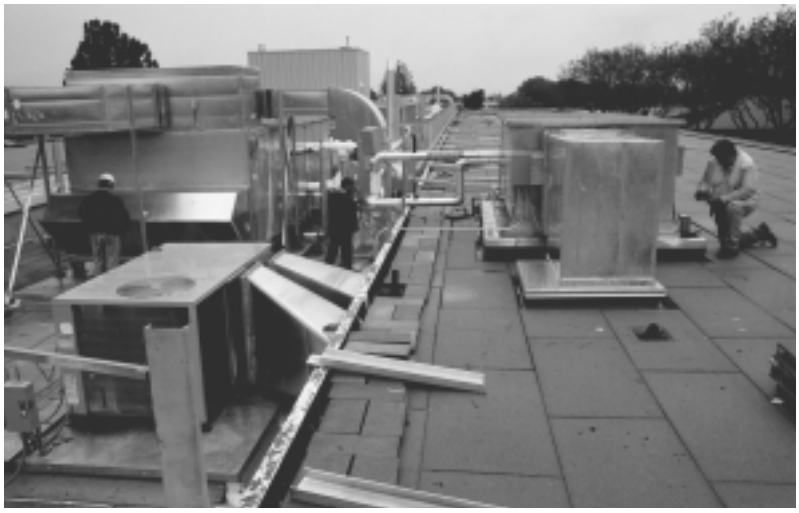
ERNEST ORLANDO LAWRENCE BERKELEY NATIONAL LABORATORY FACILITIES DEPARTMENT NEWSLETTER

JULY
1998

PRODUCTION SEQUENCING FACILITY UPDATE

Despite heavy winter and spring rains, construction recently reached an important milestone at the Joint Genome Institute (JGI) Production Sequencing Facility, with completion of the tenant improvement phase for the first of two leased buildings.

As Don Beaton surveyed the rain-soaked quagmire that would become the parking lot for the 60,000-square-foot Walnut Creek facility, he noted that bad weather was only one of the challenges encountered on this fast-track renovation project. "This was not an easy time to be building," said Beaton, site supervisor for the Facilities-led effort, "but it was just another difficulty to be overcome. It's great to be working on a project like this, where people encounter what seem to be insurmountable problems and then just go about solving them."



Workers install equipment on the roof of Building 944. (Photo by Don Fike)

Tenant improvements for Building 944—which were carried out by the landlord's contractor—included major structural reconfigurations to create larger, more flexible laboratory spaces. Explains Project Manager Kirk Haley, "The individual labs were not configured as required and were entirely too small to meet JGI's flexibility requirements." The solution devised by Facilities architect John Musante was to remove alternating shear walls that separated the existing labs, replacing some with steel trusses and reinforcing some remaining walls with steel frames.

But the greatest design challenge, according to Musante, was meeting the spatial needs of JGI's three partners, Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Berkeley Lab—needs that exceeded the available square

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50A ELEVATOR TO BE UPGRADED

Work begins Monday, July 6, on upgrades to the 50 Complex North Elevator, located in Building 50A. The project will modernize the 35-year-old traction elevator, eliminating the frequent breakdowns that have frustrated riders for some time.

Unfortunately, it's not yet time to put away the "Out of Service" sign: the elevator will be offline for the duration of the project, until August 17.

The project will provide new elevator car doors and door operating equipment, a new suspension system for the outside doors, reconditioning for the drive motors, and a new elevator control system. The car interior will get a fresh coat of paint, a new floor, and new control panels and floor indicator lights. The elevator call buttons and indicating lights at each floor will be replaced.

While construction is in progress, temporary signage will indicate detours to and from 50A. All floors in 50A except the first are accessible from the 50B elevator without climbing any stairs. Although the corridor through Room 1165 does join the first floors of 50A and 50B, access is by key card only. During the project, this corridor will be available to persons with disabilities. Prox-key holders requiring such access on a continuing basis should contact Martin Dooly (MKDooly@lbl.gov). To request one-time escorted access, go to the NERSC control room (50B-1217) or call 7600.

INSIDE

PRODUCTION SEQUENCING FACILITY

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footage. Says Musante, "The most taxing design exercise required maximizing building efficiencies to meet a space program larger than available square footage, as well as adapting the existing facility to meet 1995-code-mandated egress requirements. In Building 944 we've been successful in both of these efforts."

Because the research teams from the three labs have differing approaches to genetic sequencing, and because the technology is changing so rapidly, the building design incorporates many modular features to allow easy reconfiguration of laboratory spaces. Overhead cable trays and pipe racks carry all utilities—air, deionized water, lab gases, electrical, and data—to all laboratory spaces, providing service to virtually any location. Lab furniture has also been selected and designed for easy reconfiguration, and some perimeter walls are nonstructural, allowing for future expansion into adjacent space.

Outfitting of Building 944, including installation and connection of all laboratory furniture and specific lab equipment, will take place this summer, with engineering design by Eichleay Engineers and construction by Griffin Construction Company. Commissioning of all Building 944 systems is set for the fall of 1998.

Building 945 will provide administration and other support, along with some additional production facilities. The initial design phase is now in progress.

FROM THE FACILITIES MANAGER...

At our last meeting with DOE-OAK, we reviewed the performance measures for this year. Based on the first two quarters, we will do as well as last year, when we received our second "Outstanding" in as many years. We still have to look at the results for the third quarter, but all of you can be very proud of your efforts.

Many kudos for the crews that fought El Nino this winter. Roof leaks were down despite the heavy rain. The major slopes stayed where they were; and the few minor slides were dealt with quickly. Your work over the years is paying off.

The last phase of the electrical upgrade has begun, with awarding of the contract for installing the cable ducts from Grizzly Substation to the 51 area. For the next few months McMillan Road will be partially closed and parking in that area will be limited. This is the first contract awarded using the new safety criteria. The subcontractor chosen has an excellent safety record and was also the low bidder.

We were able to find funding to remove unused items from Stores. This year we will excess about 5,000 items that have not been issued in the past twelve months. Credit is due to Support Services for identifying these items and processing them out of the system. By relocating Receiving to 69, Support Services has also cut a day from deliveries and reduced the number of "lost" packages.

We regretfully say goodbye to two mainstays of the department. Loretta (Reese) Huebschle has retired. She kept the Lab looking clean despite its age and lack of paint for many years. Also leaving to pursue other goals is Rachel McGee. Rachel started in Building 76, and when we really needed her help, became project administrator for the IHEM projects. We will miss them both.

Bob Camper

Work SMART ...
Work SAFELY ...
If it is not safe, STOP the work.

LORETTA HUEBSCHLE RETIRES

After 17 years at Berkeley Lab, Custodial Supervisor Loretta Huebschle retired on June 3.

Loretta grew up in the Central Valley, living first on a dairy farm in Livingston, which went on to become the Gallo winery, and later in Hilmar. Before coming to the Lab in 1981, Loretta was a licensed cosmetologist. She claims that she took the job as custodian as a "paid vacation" from the stresses of hairdressing. Four years later, she became department supervisor with responsibility for some 20 custodians.

When asked what she'll miss most about the Lab, Loretta says, "A lot of things. Interacting with people—I'll certainly miss that. I'm a real people person." Her people skills were rewarded in 1985 when Loretta received an Outstanding Performance Award for establishing a program for hiring, training, and addressing the special needs of deaf employees.

When asked about her future plans, Loretta says, "You don't have enough paper!" Loretta's immediate plans include a trip to Colorado to see her stepgrandson and stepgranddaughter

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FACILITIES DEPARTMENT

Facilities provides Berkeley Lab with a full range of architectural and engineering, construction, and maintenance services for new facilities and for modification and support of existing facilities.

Architectural and engineering services include facility planning, programming, design, engineering, project management, and construction management. Maintenance and construction functions include custodial, gardening, and lighting services; operation, service, and repair or replacement of equipment and utility systems; and construction of modifications, alterations, and additions to buildings, equipment, facilities, and utilities. Additional services include bus and fleet management, mail distribution, stores distribution, and property disposal.

Ongoing Facilities activities include renewal and upgrade of site utility systems and building equipment; preparation of environmental planning studies; in-house energy management; space planning; and assurance of Laboratory compliance with appropriate facilities-related regulations and with University and DOE policies and procedures.

The Work Request Center expedites facility-related work requests, answers questions, and provides support for facility-related needs.

FOCUS ON SERVICE: GROUNDS

An apparently endless succession of rainy days, like this last winter's, can make life seem dreary and uneventful. This hasn't been the case for Grounds Superintendent Bob Berninzoni, whose crews have had to deal with fallen trees, clogged storm drains, and slipping hillsides as a result of this year's heavy rains.

Storms brought down 30 trees at the Lab this winter. Luckily, they all fell at night or on weekends. Damage was limited to pedestrian walkways, which had some broken railings and steps, and some pavement broken when a tree was uprooted. "It's amazing that no cars were damaged this year," says Berninzoni. One morning grounds workers had to clear a number of big pine branches from the Building 25 parking lot. On another morning, early birds arrived to find half a tree lying across Cyclotron Road outside the main gate.

But it took a lot more than good luck to minimize damage from the wettest winter in nearly 130 years. As reported in the January *Facilities Quarterly*, Berninzoni and other Facilities managers started preparing for El Nino last summer. Many of the weakest trees have been removed, and hillsides were stabilized in anticipation of heavy runoff and saturated soil.

The slope behind Building 84 was a particular area of concern, because nearly all its eucalyptus trees had been removed. This area was the main focus of last year's drainage control work, and came through in good shape, although the hill is so saturated with water that large hydraugers—horizontal drainage pipes imbedded far into the hill—are still running about half-full. Slope stability elsewhere at the Lab was also good, with only three minor landslides.

Roadways also held up well. Berninzoni attributes this to the extensive asphalt-sealing work done last summer by Technical Services. This prevented water from eroding and undermining roadbeds.

This was a busy winter for grounds crews. In addition to cleaning up after storms, grounds personnel worked through the storms to keep storm drains open. When it wasn't raining—or wasn't raining hard—the Lab's revegetation plan kept them busy planting redwoods and native

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COMPLIMENTS

Louise Millard, manager of Conference Planning Services, and Food Services manager Mark Blum give rave reviews to Bob Berninzoni's custodial staff for the floor and carpet cleaning at the Cafeteria. "The staff really accomplished a professional job in a timely manner," writes Blum.

Ginny Lackner of EH&S sends her appreciation to Richard Gano and Fleet Operations "for having things in such good order" for the annual EBMUD inspection. Writes Lackner, "I appreciate their support in our ongoing excellent compliance record with EBMUD."

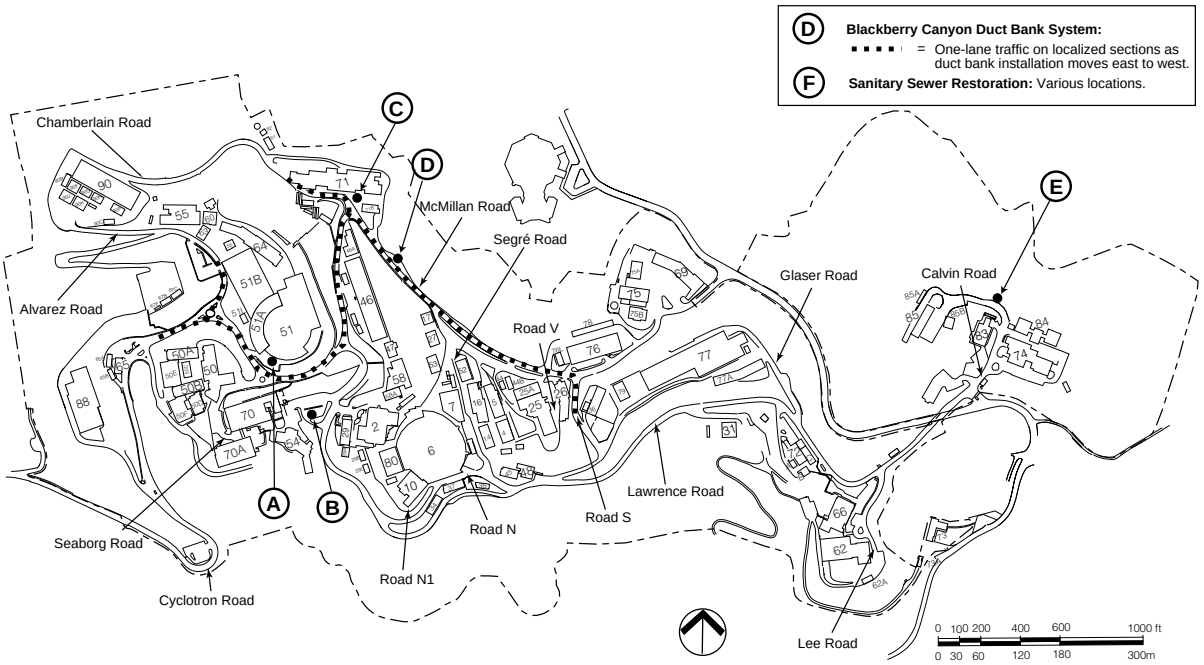
WORK REQUEST CENTER

Telephone	6274
Fax	7805
Quickmail	Facility
E- or VAX-Mail	Facilities@lbl.gov
cc:Mail	LBL Facilities
Mailstop	76-222

WRC welcomes questions or comments about the Facilities Quarterly.

CONSTRUCTION AND YOU

Current construction projects affecting parking or vehicular or pedestrian circulation



Project Contacts. The name in parentheses after each project is the Project Manager (PM) or other person responsible for project oversight. This person will be happy to answer any questions about the project.

Building 51 Painting

(A)

JULY	AUG	SEPT

Control of pedestrian traffic during July and August to allow for painting of curved wall between EPB Hall and fence gate. (Bill Wu, x5216)

Bldg 54 Conference Center Modifications

(B)

JULY	AUG	SEPT

Construction activities may impact local parking through August. (Richard Stanton (x6221)

Bldg 71 Painting

(C)

JULY	AUG	SEPT

During July and August no pedestrian access to west entrance of Building 71. (Bill Wu, x5216)

Blackberry Canyon Switching Station—Duct Bank

JULY	AUG	SEPT

(D)

Laydown yard will use parking strip on McMillan Rd near Bldg 71B to year's end. Duct bank construction is expected to begin in late June or early July and continue into October. It will require localized lane closures as work progresses along Road S, McMillan Rd, and parts of Cyclotron, Chamberlain, and Alvarez roads. Critical intersections will be scheduled for weekend work only. (Chuck Taberski, x6076)

Calvin Rd Crib Wall Replacement

JULY	AUG	SEPT

(E)

Calvin Rd to and from Building 85 barricaded, with single-lane traffic control, during August and September for work on storm-damaged crib wall. (Bill Wu, x5216)

Sanitary Sewer Restoration

JULY	AUG	SEPT

(F)

Will impact parking at various locations for 2–5 day duration through summer. (Lonny Simonian, x6088)

"CAUTION—CONSTRUCTION AREA"

Construction barricades and warnings are there for your protection. Under no circumstances should you cross a construction barricade, or disobey posted warnings or directions. Please contact the Project Manager for escorted access to construction areas.

ON THE DRAWING BOARD

projects in study or conceptual design

Bldg 77 Rehabilitation of Building Structure and Systems

Initial funding is set for FY99. This project will rehabilitate Building 77's structural system to restore lateral force resistance and arrest differential foundation settlement. In addition, the project will modernize the building's architectural, mechanical, and electrical systems. (Lonny Simonian, x6088)

Bldg 74 Rehabilitation of Building Systems

A conceptual design report has been prepared for the upgrade of Building 74 mechanical and electrical systems, seismic upgrade of the structure, and code upgrade of architectural features. As part of the project, the Building 84 utility center will be expanded to accommodate Building 74 utilities, including relocated mechanical equipment and new electrical switchgear. If this project is funded, project design will begin in FY2000. (Richard Stanton, x6221)

IN PROGRESS

funded projects

Bldg 51 First Floor Space Conversion—North

Approximately 5500 square feet of space in the northern portion of Building 51 is being converted for the Superconducting Magnet Group. The project will provide additional electrical power, lighting, fire protection, piping for mechanical systems, and a bridge crane. The project also includes demolition of existing outdated and abandoned equipment, and relocation of other existing equipment.
(Lonny Simonian, x6088)

Bldg 54 Conference Center Modifications

This project will construct a new deck on the south and west sides and a new concrete walkway on the east side of Perseverance Hall. The upgrade will provide an informal meeting area at the perimeter of the conference center and direct exterior access to both conference rooms. (Richard Stanton, x6221)

Bldg 34 Chilled Water Plant

Construction started in January 1998. The project includes installation of an additional cooling tower and chiller serving the ALS. The original construction of Building 34 provided space for this expansion. Construction is substantially complete with chiller and cooling tower startup remaining. (Lonny Simonian, x6088)

JGI Production Sequencing Facility

Located in existing buildings in Walnut Creek, California, this 5,800 square meter (62,600 square-foot) facility will house the automated DNA sequencing operations of the Joint Genome Institute (JGI). Tenant improvement design is underway for Building 945. The landlord's construction of Building 944 tenant improvements has been completed, and outfitting work for Building 944 is underway. Occupancy is scheduled for Fall 1998. (See story on page 1.) (Kirk Haley, x5973)

FOCUS ON SERVICE

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California grasses. Winter is the best time to plant redwoods, because it's not necessary to water them.

The Revegetation Plan is the Laboratory's long-term commitment to restoring and maintaining a natural, fire-safe redwood and oak woodland environment. In addition to planting native species, the Plan includes ridding the Labsite of invasive plants, notably French broom, an aggressive and tenacious invader that is a serious fire hazard. In February a contractor came onsite to pull out the broom, which has resprouted from the roots and seeds left by the ongoing eradication effort, now in its third year. "It will take a good five or ten years to eradicate the broom, because of its 10-year-old seed bed." says Berninzoni. "We have to keep battling."

Currently, clearing of grass and other ground cover is in progress, now that the grass had gone to seed and the chance of more rain is small. Cutting the grass helps spread the seed, making for a better crop next winter. Waiting until the rain stops prevents the grass from growing back when we don't want it—during the summer fire season.

The herd of goats now on the hill is very efficient in controlling the ground cover on steep hills, where human crews would have limited mobility. Hand crews are more efficient on gentler terrain, where they started clearing underbrush and grass on June 15. According to Berninzoni the goats are particularly fond of thistles, which have grown in abundance this year. Unfortunately, broom is about as popular with goats as Brussels sprouts are with children.

As we move into summer, grounds crews will continue planting and maintaining vegetation. Tree removal in Strawberry Canyon will conclude with elimination of eucalyptus and pine behind Building 85. These trees are threatened by the eucalyptus bore and pitch canker. Next year tree removal will focus on Blackberry Canyon, where crews will thin out eucalyptus behind Building 90 and near the main Laboratory entrance. Over the last three years Berkeley Lab's strategy has consisted of removing unhealthy trees before the can be infected, and dispersing tiny bore-eating wasps (harmless to humans). According to Berninzoni the Lab hasn't lost a single tree to the bore since this strategy was adopted.

What happens when summer is over? Bob Berninzoni is already thinking about next winter.

LORETTA RETIRES

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perform with the nationally-known Concord Blue Devils drum and bugle corps. Then, she and her husband Carl hope to take an Alaskan cruise.

Recently, one of Loretta's many antique clocks—a cuckoo clock—went haywire, cuckooing up to 32 times on the hour. When she got the repair bill, Loretta resolved to learn antique clock repair. If this doesn't keep her busy, she'll have time for furniture refinishing and carpentry in her well-equipped workshop.

Over 50 of Loretta's friends at the Lab gathered on May 29 at Oceans East in Emeryville to give her a real show of appreciation. Operations and Maintenance Manager Don Weber presented Loretta with a plaque, and Director Charles V. Shank sent a special message, in which he praised Loretta's "problem-solving ability and can-do attitude." "You prove the principle," Dr. Shank wrote, "that one person really can make a difference, even in a large organization."

Shown here with her retirement plaque, Loretta Huebschle has been a familiar face at the Lab for 17 years. (Photo by Roy Kaltschmidt)

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